2.0 INTRODUCTION

2.1 PROJECT LOCATION

The Pleasant Grove and Curry Creek watersheds are located in western Placer and eastern Sutter Counties in an area expected to undergo significant development in the next fifty years (Figure 2-1). The watershed encompasses portions of the cities of Roseville and Rocklin and is bordered by the Auburn Ravine/Coon Creek watershed to the north, and the Dry Creek watershed to the south. Curry Creek is a tributary of Pleasant Grove Creek, and both streams flow into the Pleasant Grove Canal, which empties into the Cross Canal and thence into the Sacramento River. These creeks were historically dry or very nearly dry in the summer months, but are now mostly perennial due to urban development and rice farming. The watershed is approximately 24 percent urbanized, with the remainder in agriculture, rural residential and natural habitat. The population of the watershed is estimated at approximately 69,000 residents in 2004, with the majority living in the urban and suburban communities of Roseville and Rocklin. Chapter 3 discusses the watershed condition in greater detail.

2.2 PROJECT BACKGROUND

The Pleasant Grove/Curry Creek (PG/CC) watershed is the only watershed in western Placer County for which no Coordinated Resource Management Plan (CRMP) has been developed, yet it includes some of the fastest developing areas in the County. In 2003, Placer County Planning secured CALFED funding to facilitate and support the development of an Ecosystem Restoration Plan (ERP) for the Pleasant Grove/Curry Creek watershed to identify strategies to preserve and restore valuable natural resources that can be implemented as planned development occurs. The ERP is intended to address several important aspects of ecosystem function: water quality, sediment load, floodplain management, and habitat restoration, and provide a framework in which the factors that affect landscape ecological functions at a watershed scale in the PG/CC basin are considered in land use decisions in the watershed.

The ERP is one of several planning efforts that collectively address resource management and land use in the Pleasant Grove/Curry Creek watershed at varying degrees of specificity. These include the General Plans for the County of Placer, the County of Sutter, the City of Roseville, the City of Rocklin, the Placer County Conservation Plan, and the Roseville Creek and Riparian Management and Restoration Plan. The

ERP is the only plan that encompasses the entire watershed and as such is intended to provide a more broad perspective on resource management issues.

2.3 ERP GOALS AND OBJECTIVES

The potential for ecosystem restoration within the Pleasant Grove and Curry Creek watersheds cannot be separated from the impacts that are associated with both the existing and future land uses within the watershed. The ERP is intended to guide future planning, restoration and land use management activities in the watershed based on the following Vision, Goals and Objectives. These Goals and Objectives were developed in collaboration with the members of the Pleasant Grove/Curry Creek Watershed Group.

2.3.1 <u>Vision</u>

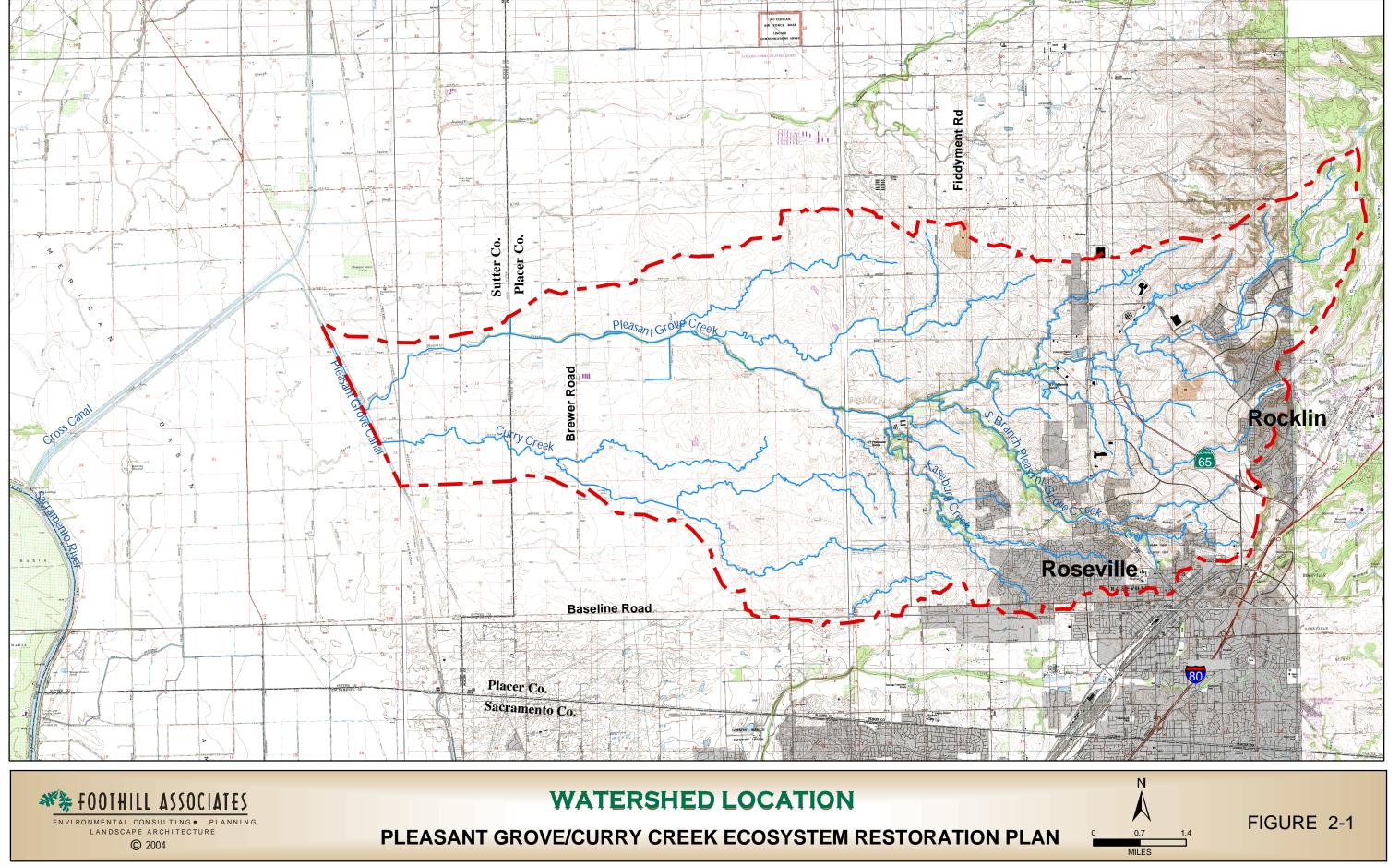
The vision statement identifies the desired future condition for the watershed. Before implementing or adopting future actions and policies they should be evaluated to see if they are consistent with the conditions described by the vision statement. The Vision for the Pleasant Grove and Curry Creek watersheds is as follows.

"The Pleasant Grove/Curry Creek Watershed sustains a variety of healthy native upland and riparian habitats situated within an economically sustainable matrix of carefully planned and implemented mixed use communities and agricultural lands."

2.3.2 Goals and Objectives

Goals, like the Vision, are also statements of desired future conditions. However, Goals provide more detailed elaboration on specific aspects of the Vision. Objectives are action oriented and describe what needs to be done to implement the related Goal. While each Objective is shown here associated with the primary Goal it implements, most Objectives support multiple Goals since healthy ecosystem function by definition requires an integrated approach to resource management and stewardship.

Strategies and projects are the final level of ecosystem restoration planning addressed by this ERP and describe specific, discrete tasks to be completed in order to accomplish the Plan's Objectives. Chapter 6 includes a list of proposed strategies and projects. These typically implement multiple Goals and may address multiple Objectives depending on the nature of the project.



GOAL 1: Sensitive habitats and species within the watershed are protected.

- Objective 1.1 Identify the various habitat types within the watershed and evaluate their distribution and condition.
- Objective 1.2 Identify the wildlife species that have potential to occur within the watershed based on habitat availability.
- Objective 1.3 Prioritize which habitat types and species are significantly threatened and/or in decline.
- Objective 1.4 Provide protection to sensitive habitats and species through a combination of means including public acquisition, conservation easements, and development of preserves.

GOAL 2: Degraded habitat areas with high potential for healthy ecosystem functionality are restored and/or enhanced.

- Objective 2.1 Identify opportunities for improving ecosystem function through specific restoration or enhancement projects.
- Objective 2.2 Prioritize restoration/enhancement projects based on overall ecosystem value, feasibility, and sustainability so that limited resources available for restoration/enhancement are expended for the greatest benefit.
- Objective 2.3 Seek and obtain funding and other resources as needed to implement restoration/enhancement projects.
- Objective 2.4 Develop and implement stewardship of restoration/enhancement projects for adequate establishment periods to insure their longterm success.

GOAL 3: Ongoing monitoring and mapping of ecosystem conditions provides meaningful information to prevent and/or correct adverse impacts.

Objective 3.1 - Implement a regular program of water quality monitoring to characterize ambient conditions and to identify both the source (point and non-point) and constituents of discharges into surface waters.

- Objective 3.2 Monitor the condition of restoration/ enhancement projects to provide information on project benefits and to improve the design and implementation of future projects.
- Objective 3.3 -Map and monitor hydrology and hydraulics of the watershed to better understand impacts from large and small storm events and dry season flows on channel form, vegetation and water quality.
- Objective 3.4 Map and monitor vegetation and wildlife distribution and condition in the sensitive habitats to provide early detection of possible adverse impacts and to aid in developing adaptive management strategies. Include non-native invasive species in this monitoring.
- Objective 3.5 Establish and populate a database with historical and future data on water, vegetation, and wildlife monitoring for purposes of change detection and tracking.
- Objective 3.6 Establish standard approaches to gathering and interpreting monitoring data so that historical observations may be related to current observations in a meaningful way.
- GOAL 4: Biological diversity of healthy native habitat is maintained by preventing the establishment of invasive, non-native plant and animal species in native ecosystems.
 - Objective 4.1 Identify most significant non-native invasive species and vectors by which they are entering the watershed.
 - Objective 4.2 Map locations where non-native invasive species are established or becoming established.
 - Objective 4.3 Develop a prioritized strategy to eradicate and/or control significant non-native invasive species that includes coordination with public and private stakeholders in adjacent watersheds.
 - Objective 4.4 Secure funding or other support to implement the prioritized strategy for significant nonnative invasive species eradication/control.

- Objective 4.5 Identify ongoing maintenance/management strategies to prevent reestablishment or maintain control of the establishment of nonnative species
- Objective 4.6 Implement public education projects to publicize the adverse impacts of non-native invasive species and to limit their introduction and spread through vectors such as private ornamental landscapes and the release of non-native fish or wildlife into natural areas.
- GOAL 5: The ecological richness, function, and viability of the watershed are enhanced by the size, location, diversity, and connectivity of habitat areas.
 - Objective 5.1 Develop an overall open space and habitat preservation strategy for the watershed that includes a representative variety of native habitat communities of adequate size and with connecting corridors to maintain access for wildlife.
 - Objective 5.2 Protect, enhance or recreate natural riparian processes, particularly hydrology and associated high water events, to promote the natural cycle of channel movement and sediment deposition that create a mosaic of riparian vegetation types.
 - Objective 5.3 Design and implement restoration projects that complement the existing diversity and structure of habitat types and locations.
- GOAL 6: Practices, policies, and ordinances related to flood control, land use and agriculture, and economic development strategies serve to protect and/or enhance ecosystem function of sensitive habitats.
 - Objective 6.1 Review existing policies, ordinances and other mechanisms that are intended to protect sensitive habitats and evaluate their effectiveness.
 - Objective 6.2 Recommend modifications to existing policies and ordinances to better facilitate the protection of sensitive habitats.
 - Objective 6.3 Integrate meaningful ecosystem protection and restoration opportunities with the

- development review and approval process to encourage low impact development and ecologically sensitive transportation planning.
- Objective 6.4 Provide adequate enforcement of storm water and other water quality regulations and access restrictions (such as for vehicles, dogs, etc.) to protect sensitive habitats from adverse impacts.
- Objective 6.5 When designing restoration/enhancement projects, anticipate hydrological and species displacement/competition impacts associated with new development in the watershed.
- Objective 6.6 Where feasible, ensure that flood control projects benefit habitat and wildlife while also meeting the needs of the watershed's agricultural and urban populations.
- Objective 6.7 Recognize the need for a balance between economic viability and ecosystem protection and restoration in all aspects of watershed planning for the benefit of future generations.

GOAL 7: Watershed stakeholders are engaged as active stewards in the protection and enhancement of ecosystem health.

- Objective 7.1 Include a broad coalition of public and private stakeholders (property owners, educators, special interest organizations, residents, businesses, public agencies, local governments, etc.) in the full range of watershed planning activities, such as community plans, development plans, and ecosystem restoration plans, and in the implementation of these plans.
- Objective 7.2 Encourage citizen-based participation wherever feasible such as for water quality monitoring or removal of non-native invasive species.
- Objective 7.3 Encourage a wide variety of watershed advocacy organizations that reflect the age, cultural and economic diversity of watershed interests.
- Objective 7.4 Develop a public education and outreach strategy to identify specific watershed stewardship opportunities and to engage stakeholders in these opportunities.

 Stewardship opportunities should be diverse ranging from community sponsored events focused on public lands to voluntary changes in land management practices by individuals on private residential and agricultural property.
- Objective 7.5 Make information about watershed resources and conditions readily available to stakeholders though a variety of methods including the media, libraries, the internet, educational programs, events, local governments, and special interest organizations.
- Objective 7.6 Continue the Pleasant Grove Curry Creek
 Watershed Council or a comparable forum to
 regularly convene stakeholders to address
 watershed issues and collaborative problem
 solving.
- Objective 7.7 Seek and obtain funding and other resources as needed to support implementation of the

- education/outreach strategy, dissemination of watershed information and coordination/ facilitation of the watershed stakeholder forum.
- Objective 7.8 Collaborate with other watershed planning and stewardship efforts in the region to optimize resources and to identify and implement projects with mutually beneficial outcomes.
- Objective 7.9 Implement at least one publicly accessible project within the watershed that can be used to educate stakeholders on watershed resource values and highlight the role of stakeholder stewardship in ecosystem preservation and restoration.
- GOAL 8: Water quality meets or exceeds the standards established by the Central Valley Regional Water Quality Control Board's Water Quality Plan (the Basin Plan) for Inland Surface Waters.
 - Objective 8.1 Control discharges into and human activities adjacent to the creeks to prevent unhealthy levels of anthropogenic bacteria.
 - Objective 8.2 Implement measures to prevent discharge of urban runoff containing contaminants (e.g., herbicides/pesticides, nutrients, and hydrocarbons) from both existing and new developments and roads.
 - Objectives 8.3 Prevent excess sediment by controlling upland and channel erosion associated with increased runoff due to development or loss of stabilizing vegetation.

2.4 ERP STRUCTURE

The first two chapters of the Pleasant Grove/Curry Creek ERP include an executive summary and an introduction to the Plan background, vision, goals and objectives. Chapter 3 provides a generalized assessment of the existing condition of the watershed. It addresses land use, infrastructure, population, hydrology, habitat for key resources, and potential restoration sites. The fourth chapter discusses how the likely future development scenario in the watershed will affect population, hydrology, and habitat for key resources based on anticipated changes in land use and the associated

resource impacts. Chapter 5 provides an explanation of the main planning principles that were adopted in development of the subsequent ERP strategies and project contained in Chapter 6. Implementation recommendations for the ERP are the focus of Chapter 7.